CLAIMS

1. Water-soluble or water-dispersible amphiphilic cationic associative polyurethanes of formula (I):

$$R\text{-}X\text{-}(P)_n\text{-}[L\text{-}(Y)_m]_r\text{-}L'\text{-}(P')_p\text{-}X'\text{-}R' \qquad (I)$$

in which:

R and R', which are identical or different, represent a hydrophobic group or a hydrogen atom;

X and X', which are identical or different, represent a group comprising an amine functional group which may or may not carry a hydrophobic group or the L» group;

L, L' and L», which are identical or different, represent a group derived from a diisocyanate;

P and P', which are identical or different, represent a group comprising an amine functional group which may or may not carry a hydrophobic group;

Y represents a hydrophilic group;

r is an integer between 1 and 100, preferably between 1 and 50 and in particular between 1 and 25,

n, m and p have values, each independently of the others, between 0 and 1000;

the molecule comprising at least one protonated or quaternized amine functional group and at least one hydrophobic group.

2. Polyurethanes according to Claim 1, characterized in that the only hydrophobic groups are the R and R′ groups at the chain ends.

3. Polyurethanes according to either of Claims 1 and 2, characterized in that R and R′ both independently represent a hydrophobic group, X and X′ each represent an L» group, n and p have values between 1 and 1000 and L, L′, L», P, P′, Y and m have the meaning indicated in Claim 1.

4. Polyurethanes according to either of Claims 1 and 2, characterized in that R and R′ both independently represent a hydrophobic group, X and X′ each represent an L» group, n and p have the value 0 and L, L′, L», Y and m have the meaning indicated in Claim 1.

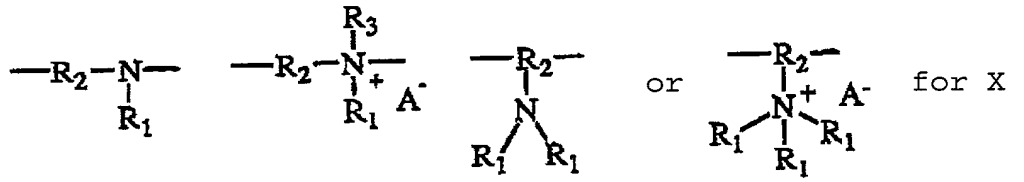
5. Polyurethanes according to either of Claims 1 and 2, characterized in that R and R′ both independently represent a hydrophobic group, X and X′ both independently represent a group comprising a quaternary amine, n and p have the value 0 and L, L′, Y and m have the meaning indicated in Claim 1.

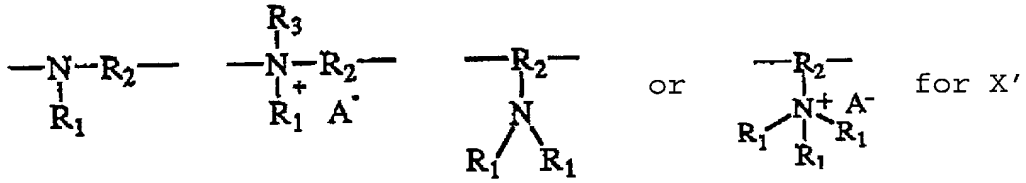
6. Polyurethanes according to one of the preceding claims, characterized in that they exhibit a number-average molecular mass of between 400 and 500 000,

preferably between 1 000 and 400 000 and in particular between 1 000 and 300 000.

7. Polyurethanes according to any one of the preceding claims, characterized in that R and R′ represent a radical or a polymer with a saturated or unsaturated and linear or branched hydrocarbonaceous chain, in which chain one or more of the carbon atoms can be replaced by a heteroatom chosen from S, N, O and P, or a radical with a silicone or perfluorinated chain.

8. Polyurethanes according to any one of the preceding claims, characterized in that X and X′ represent one of the formulae:





in which:

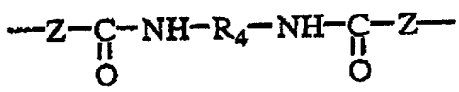
R_2 represents a linear or branched alkylene radical having from 1 to 20 carbon atoms, which may or may not comprise a saturated or unsaturated ring, or an arylene radical, it being possible for one or more carbon atoms to be replaced by a heteroatom chosen

from N, S, O or P;

R_1 and R_3, which are identical or different, denote a linear or branched C_1-C_{30} alkyl or alkenyl radical or an aryl radical, it being possible for at least one of the carbon atoms to be replaced by a heteroatom chosen from N, S, O or P;

A^- is a physiologically acceptable counterion.

9. Polyurethanes according to any one of the preceding claims, characterized in that the L, L' and L» groups, which are identical or different, represent the formula:



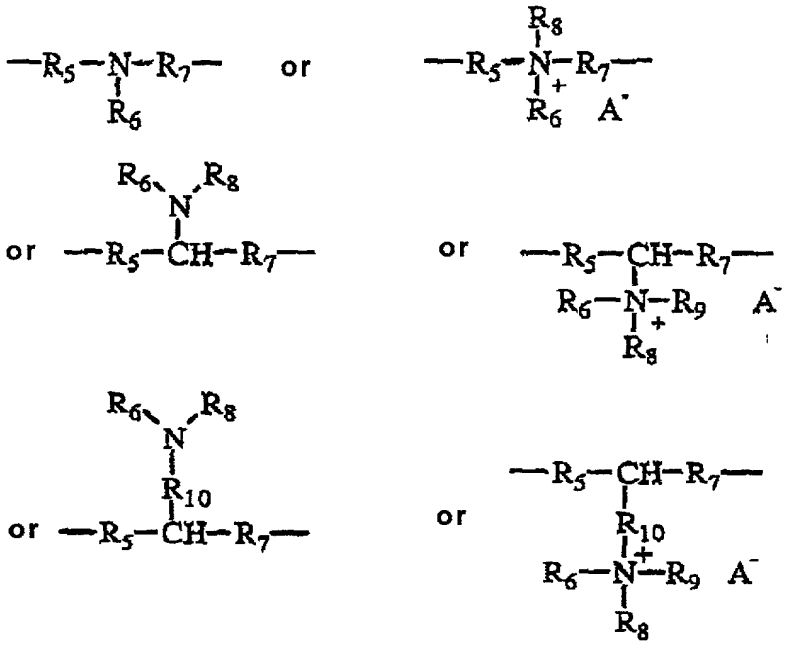
in which:

Z represents -O-, -S- or -NH-; and

R_4 represents a linear or branched alkylene radical having from 1 to 20 carbon atoms, which may or may not comprise a saturated or unsaturated ring, or an arylene radical, it being possible for one or more of the carbon atoms to be replaced by a heteroatom chosen from N, S, O and P.

10. Polyurethanes according to any one of the preceding claims, characterized in that the P and P' groups,

which are identical or different, represent at least one of the following formulae:



in which:

R_5 and R_7 have the same meanings as R_2 defined in Claim 7;

R_6, R_8 and R_9 have the same meanings as R_1 and R_3 defined in Claim 7;

R_{10} represents a linear or branched alkylene group which is optionally unsaturated and which can comprise one or more heteroatoms chosen from N, O, S and P, and

A^- is a physiologically acceptable counterion.

11. Polyurethanes according to any one of the preceding claims, characterized in that Y represents a group

derived from ethylene glycol, from diethylene glycol or from propylene glycol or a group derived from a polymer chosen from polyethers, sulphonated polyesters and sulphonated polyamides.

12. Use of a polyurethane as defined in any one of the preceding claims as thickener or gelling agent in a composition for topical application with a cosmetic use.

13. Cosmetic composition comprising, in a cosmetically acceptable medium, at least one polyurethane as defined in any one of Claims 1 to 11.